Service manual

COFFEE QUEEN® OF SWEDEN

NORDIC

Juice machine

Din återförsäljare / Your retail dealer

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S / EN

Rev. 090915

Dispenser

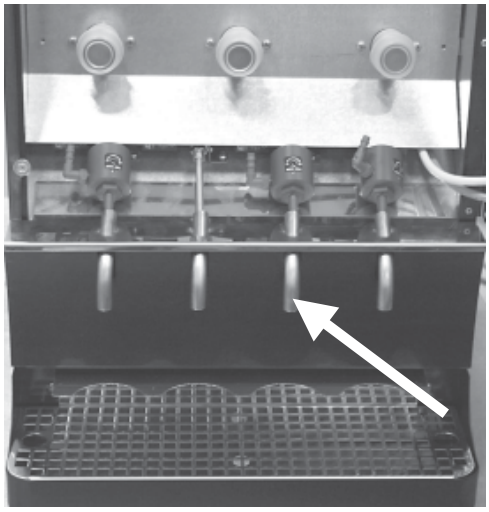
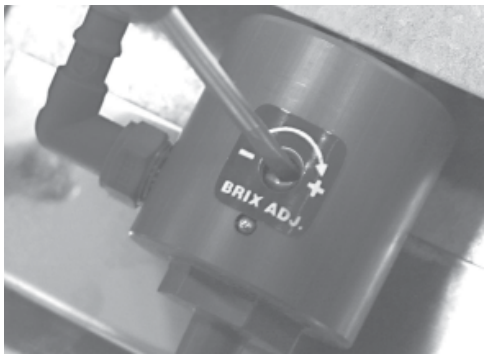
Dispenser description for Nordic

Nordic is a dispenser for cooling water and mixing juice- concentrate to a ready to drink product.The dispenser is for three non-carbonated drinks and chilled water.
The dispenser is connected to the water mains by a pressurised tube and to an electric wall socket by a power plug. The water-pressure is adjusted with the water-regulator and the pressure is displayed on the manometer. The water is chilled by the cooling-block, which in its turn is chilled by the air-cooled compressor.The water-temperature is adjustable with a thermostat.The mixing ratio product/water is adjusted with the ejectors. Pushing one of the four buttons on the front panel dispenses the mixed product or water.

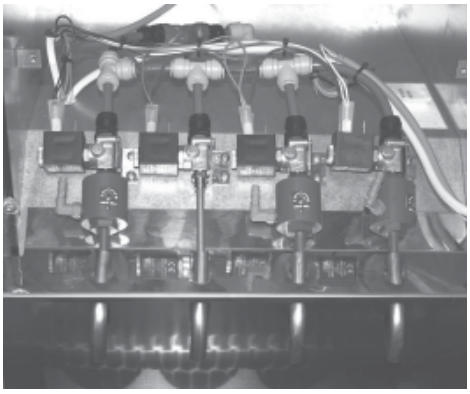
Generally!

Read the instructions carefully before you start working with this equipment.
The equipment should be installed and serviced by trained staff

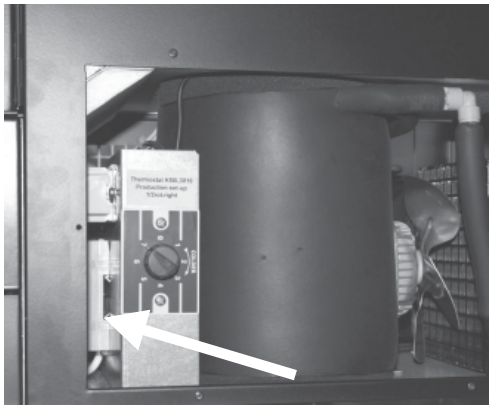
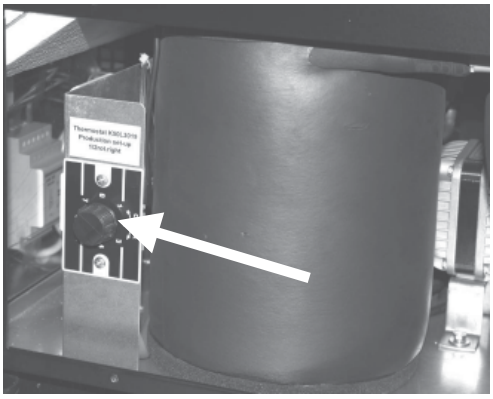
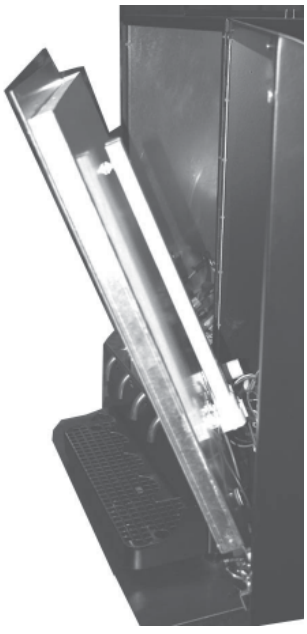
Dispenser description Nordic

Picture	description
	Water-regulator with manometer The water-regulator can be adjusted up to 6 bar. The minimum pressure is 2,2 bar. Note! When adjusting the pressure, dispense product.
	**Venturi ejector** The mixing ratio is adjusted on the ejectors. When water flows through the ejector, the concentrate mixes with the water. The mixing ratio is regulated on the ejector. There are two kinds, one for products with cells, and one for products without cells.
	Turn the adjustment screws according to the label on the ejector in order to increase or decrease the amount of concentrate.

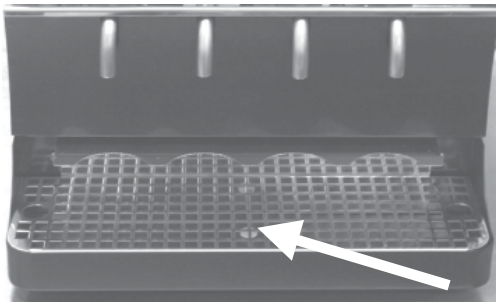
Dispenser description Nordic

Picture	description
	**Water valve** The Water valve is connected to the ejector and opens the water-flow.
	Push-button The push buttons on the front panel controls the water valves. Use only one button at a time.
	Cooling-block The cooling-block is a flow through block with three built-in stainless steel coils. **The coils are for water, refrigerant R134A and thermostat**

Dispenser description Nordic

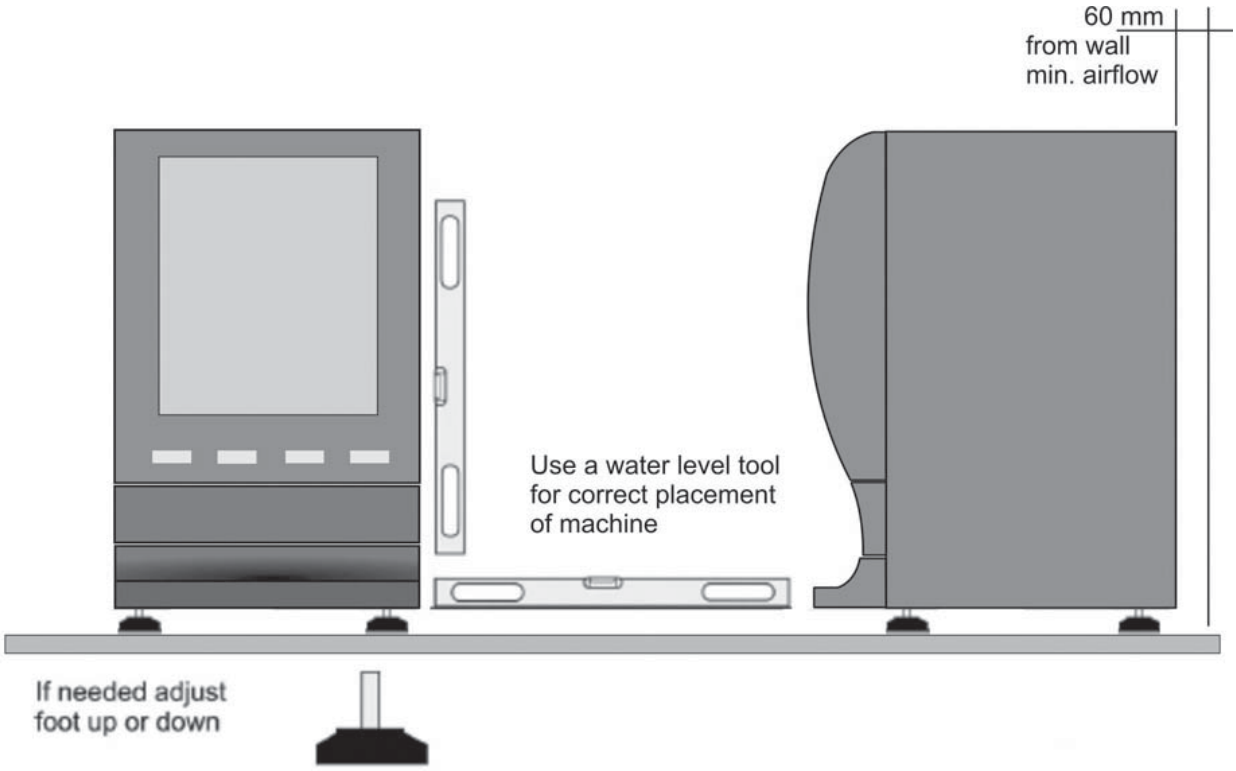
Picture	description
	**Transformer** The transformer is a 230 / 24 V (32 VA). The transformer supplies 24 V to the magnetic-valves.
	**Thermostat** The thermostat keeps the temperature within correct range. Factory adjusted do not adjust, this may cause damage and water leakage in the dispenser.
	**Illumination** Behind the front panel there is a low-energy fluorescent lamp with the effect off 24W. The fluorescent lamp is a PL-lamp.

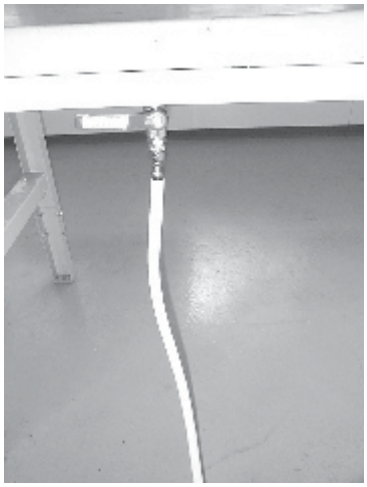
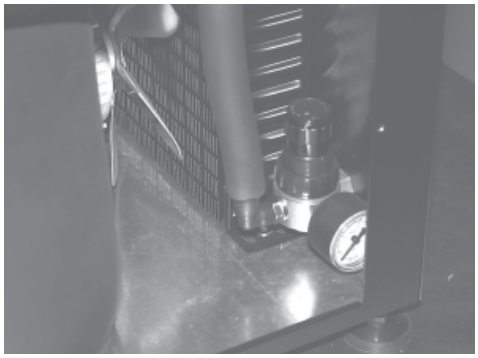
Dispenser description Nordic

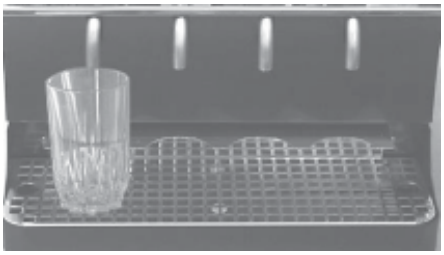
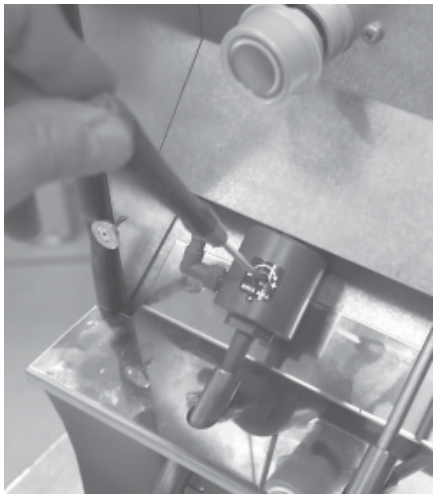
Picture	description
	**Drip-tray** **It is possible to connect drainage to the drip-tray.**
	Large particle-filter A large particle-filter is fitted between the cooling block and the water valves. **It is possible to rinse the filter if needed.**

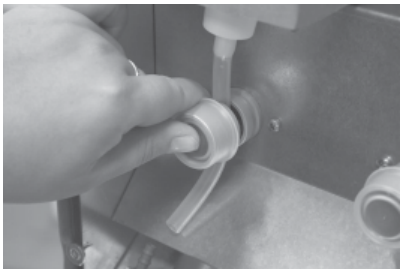
Picture	description
	Unpack dispenser from the packaging and ensure that nothing is damaged. **Place the dispenser to it´s position. Note: The dispenser weights about 49 kg.** **<u>Don't lift by door/front panel.</u>** Allow a space of min. 40mm around the **frame for air circulation.**

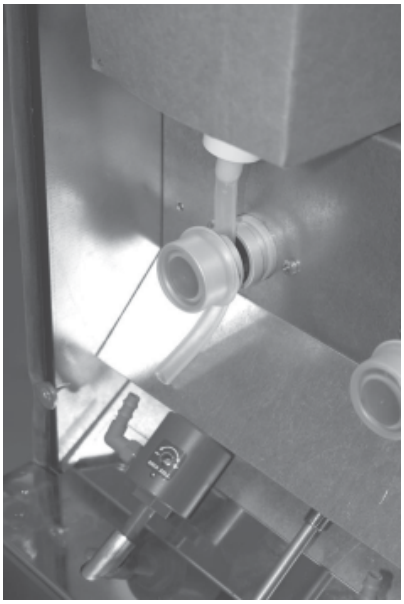
Adjustment can be made with the adjustable feet .



Picture	description
	**Connect the water-hose from the dispenser to the cold water mains (do not forget seals).** **Turn on the water and check for leaks.** **Note!** **It is strongly recommended to use some sort of water isolator in the water line in case of an emergency leakage.**
	Connect the power-plug to the wall socket. **Now the compressor starts and the front panel lights up.**
	The water pressure is factory adjusted to 2.2 bar, which is the correct working pressure. Check by pressing and holding one product button and reading the manometer. If there is variations adjust by pulling up knob and turn it until you get a reading of 2.2 bar.

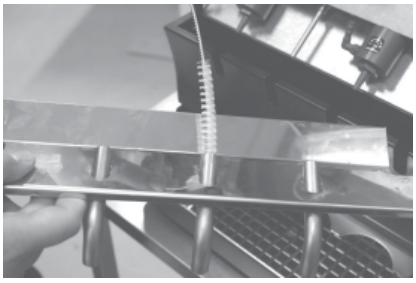
Picture	description
	Place the bag-in-box in the dispenser and connect it to the pinch solenoid-valve and ejector. **Pushing the centre of the pinch solenoid valve and sliding the tube in from the side, fixes the tube.** **Cut the tube to correct length and push it onto the elbow connector on the ejector.**
	Place a cup under the outlet pipe. **Dispense a glass of product by pressing the push-button.** **Check that the brix-value (mixing ratio) is okay, if not adjust.**
	To adjust the brix, use the adjustment screw on the ejector. **The dispenser is now ready to use**





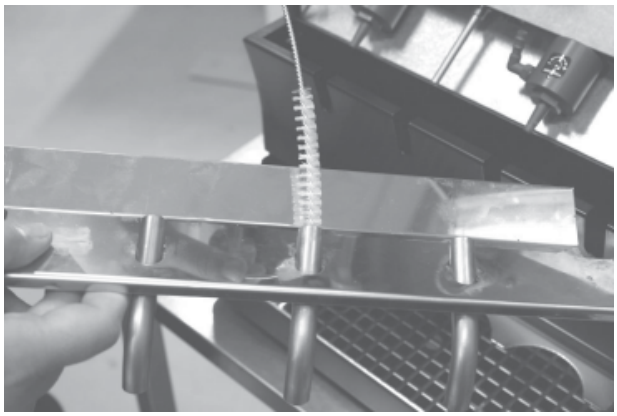
Change of bag-in-box

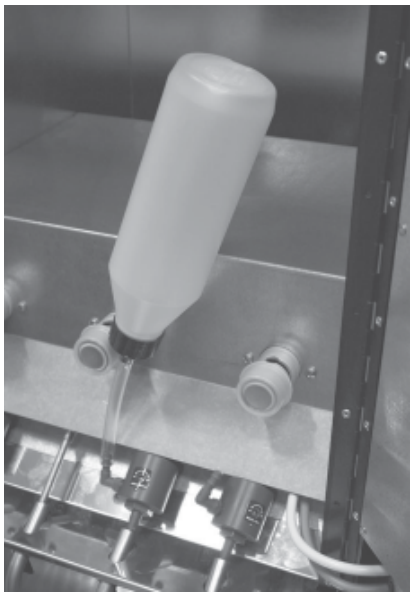
1. Turn the box so the perforated side is turned upwards.
2. Brake the perforation on the box and place the main pipe in the punched hole
3. Place the box in the dispenser so that the tube points down to wards the pinch-solenoid. Press the end of the pinch-solenoid and insert the tube from the side
4. Check the tube length so that it will reach 1cm into the venture nipple.
5. If the tube is to long, cut it to the right length.
6. Slip the tube to the venture nipple.
7. Make sure that the tube is not twisted, and shut the door to the dispenser.
8. Place a cup under the outlet-pipes and draw until the juice comes out.



Daily cleaning

1. Clean internal and external surface with a damped rag.
2. Use the cleaning-brush to clean the outlet-pipes
3. Wet the brush in water and put it in the outlet pipe from the inside of the door.
4. Clean the drip-tray.





Periodic cleaning

1. **Disconnect the bag-in-box tube from the venture.**

2. **Fill the cleaning bottle with warm water and some washing-up liquid and connect it to the venture.**

3. Shut the dispenser door and put a cup under the outlet-pipes rinse the venture and the outlet-pipes by pressing the respective push buttons.

4. Use the cleaning-brush to clean the outlet pipes

Return the boxes and connect the tubes to the ventures.

Handling and cleaning instructions Nordic

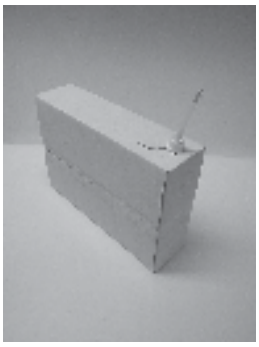


Fig. 1.

Fig. 2.

Fig. 3.

1. **Open the Bag-in-Box at the perforation. Pull out the silicon tube and the plastic connector, so it is clear of the box.**

2. **Place the box inside the dispenser. Press in the pinch solenoid and slide the tube in to the opening. (Fig 2)**

3. **Push the tube onto the ejector nozzle. (Fig3)**

4. **The dispenser is now ready to use.**

1. **When changing the Bag-in-Box, the dispenser should be cleaned with hot water.**

2. **Fill the rinsing bottle with a solution of hot water and a sanitising agent. Add two drops of washing-up liquid. Connect the tube to the nozzle and wash it through. (Fig 4)**

3. **Wet the brush in a hot water and sterilising solution. Clean the outlet pipes by pushing the brush all the way through the pipe and back again. (Fig 5)**

4. **Rinse the pipes with the water solution from the bottle.**

5. The pinch solenoid that the tube runs through should be cleaned on a regular basis, by pouring a hot water and sterilising solution over it. This will dissolve any residual concentrate.

6. The air inlet (condenser) at the back of the machine should be cleaned from dust on a regular basis by brushing or vacuuming the grid.

Fig. 4.

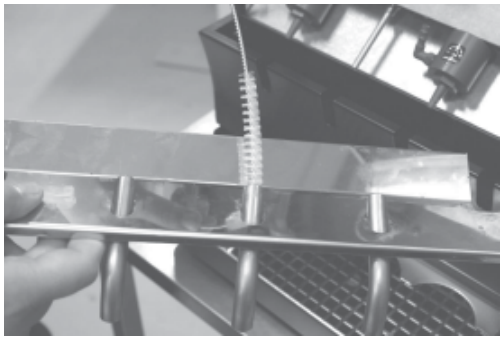


Fig. 5.

Trouble shooting Nordic

Problem	Probable cause	Attend to
Concentrate is Dripping from outlet pipe.	The tube is not properly fixed into the pinch solenoid valve	Fix the tube properly into the pinch solenoid valve
Mostly water or only water coming from outlet pipe	The tube is kinked due to incorrect length	Cut the tube to correct length
	The pinch solenoid needs cleaning.	Clean pinch solenoid with hot water.
	The tube is twisted.	Untwist the tube.
	The bag is empty.	Replace bag.
Nothing happens when I push the buttons, and there is no ”clicking” sound.	No power to the valves	Check the valve on/off - key switch inside the door.
	Thermo fuse in the transformer has cut. (On older models, a fuse has blown).	Remove power to the dispenser and put it back on after 10 sec. (Change fuse).
Nothing happens when you push the buttons, and there is a ”clicking” sound.	Water supply turned off	Check water supply
	Water regulator turned off or failed. (Manometer =0 bar).	Check water regulator (change needle valve in water regulator).
	The cooling coil has frozen. (Manometer = max pressure)	Shut off water supply and call service.

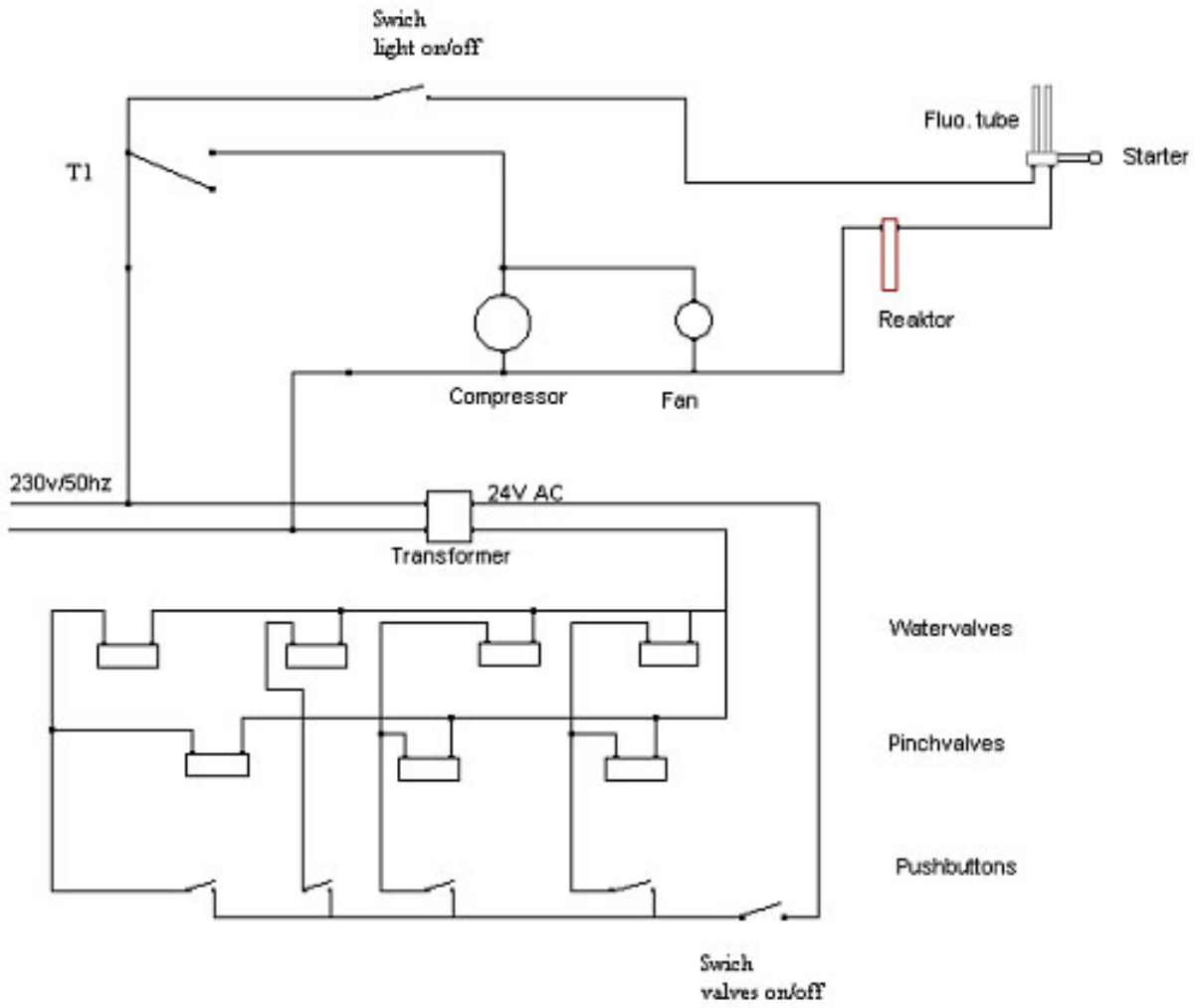
Trouble shooting Nordic

Problem	Probable cause	Attend to
The taste is to strong/ weak.	The dispenser is not cleaned properly.	Clean ejector, outlet pipes and pinch solenoid.
	The ejector is not adjusted correctly.	Call service.
It constantly drips fluid from the outlet-pipes.	Dirt in the water valve.	Call service.
Troubles with cooling system.		Call service.
The drinks are not cold.	Failure in thermostat.	Call service.
	Failure in cooling system.	Call service.

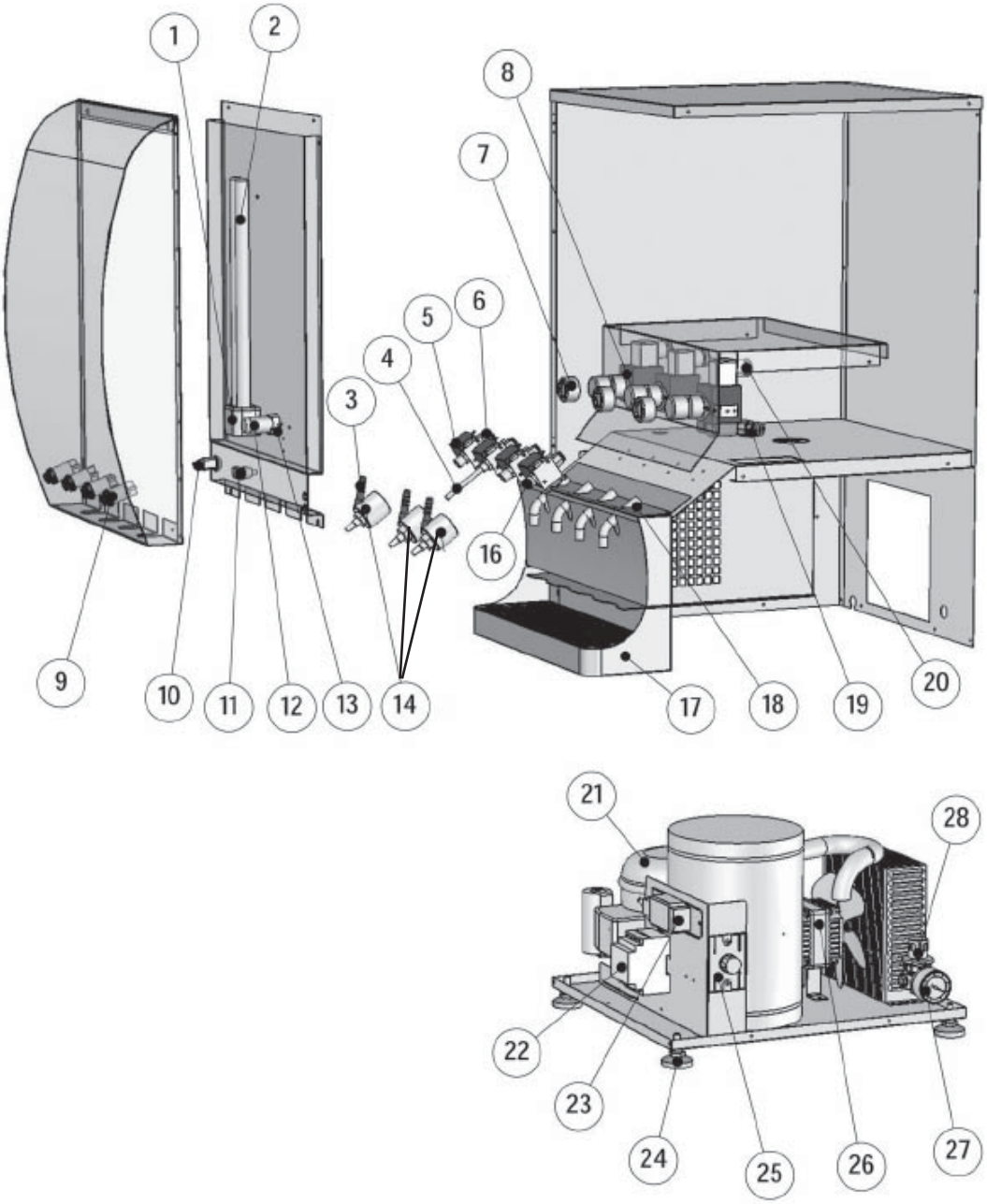
Electrical connections Nordic

Nordic with three products + water and push-buttons

T1=Thermostat
dry-block



Exploded view Nordic



Spare parts list Nordic

Pos.	Article no	Description
1	S302098	Fluorescent tube, 24W
2	S302060	Fluorescent tube holder
3	S121012	Elbow connector 1/8"
4	S122065	Pipe 80mm+S302313 barrel nipple
5	S302014	Water valve 24V
6	S302307	Quick coupling, straight 1/8”
7	S302038	Cover to pinch solenoid valve
8	S302008	Pinch solenoid valve
9	S302007	Push button
10	S302024	Key switch
11	S302101	Switch
12	S302063	Starter
13	S302061	Holder for starter
14	S302009	Ejector combo
16	S302314	Relief nipple 1/8” - 1/4” metal
17	S302192	Drip tray Nordic
18	S1104587	Outlet pipe Nordic
19	S302215	Water filter
20	S302278	Cable connector for pinch solenoid
21	S302075	Compressor
22	S302017	Transformer
23	S302059	Ballast
24	S302109	Foot
25	S1104584	Thermostat
26	S105116	Fan motor 5W
27	S302319	Manometer
28	S302318	Water regulator
Not shown in exploded view		
	S302005	Venturi by-pass ejector
	S302004	Venturi ejector
	S302020	Cleaning brush
	S302031	Plug drip tray Slim Line
	S302092	Cleaning bottle
	S302037	Water hose

Technical data Nordic

Electrical connection	230 V/50 Hz/ 2,5 A
Water connection	3,0 m Tube with 3/8" internal thread (minimum 2,2bar water pressure.)
Compressor	Elektrolux GL 80
Cooling gas	HFC-134 A Amount to fill 240 gram
Cooling capacity	294 W
Cooling system	Dry block with stainless-steel pipes inside.
Front light	24 W Fluorescent-tube
Front sign size	390 x 478 mm(27 mm must be transparent, Applies on the bottom part of the sign.
Dispenser measurement	Height 750 mm With 405 mm Depth 605 mm
Weight	49 Kg

Notes Nordic

Note 1.	The thermostat is factory adjusted and improper adjustment may cause the cooling system to freeze causing damage or water leakage in the dispenser.
Note 2.	Frequent opening and closing of the door may cause ice build-up on the cooling plate inside the cabinet which decreases the efficiency. If this happens, defrost the machine until all ice has melted.
Note 3.	It is strongly recommended to use some sort of water isolator in the water line in case of an emergency leakage.
Note 4.	Maximum ambient temperature in the room where the dispenser is located should not exceed more then 25 C.
Note 5.	If the dispenser has frozen, check water tubs and connections inside the dispenser before running the dispenser again.

COFFEE QUEEN

NORDIC Juice machine

FOR SERVICE

Please contact your retail dealer

Din återförsäljare / Your retail dealer

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